

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Currently Amended) A method for converting a document from a first language into a second language comprising the steps of:

receiving, via an electronic device, image data indicating a document, wherein said document, when rendered, comprises human-readable text written in a first language; said image data including language translation data encoded, via an encoding module, in binary machine-readable code embedded in said image data such that when said document is rendered, the encoded language translation data is both rendered on the document and not human-readable;

receiving selection data indicating a selected foreign language for translation of said human-readable text written in the first language; and

producing, via a decoding module, a human-readable translation of said document in said selected foreign language using the encoded language translation data encoded in said machine-readable code, wherein the encoded language translation data represents a correction code C that describes a set of editing

functions E that are applied to the text, which is human readable text P, of the document having the first language, to convert the text P from the first language into the second language, wherein for each page of the text P in the first language, there is an accurate translation ATL into the second language L;

wherein a processing routine RL, is applied to each page of the text P in the first language to produce the translation of the text P into the second language L, the quality of the translation RL(P) being on a continuum from very good to very bad;

wherein the code C is computed such that:

$$\text{ATL} = \text{E}(\text{C}, \text{RL}(\text{P})),$$

and the code C is transmitted as glyphs on the page containing the text P; and

wherein multilingual encoding and decoding modules reconstruct the accurate translation ATL by optical character recognition processing of the text P, by application of the processing routine RL to the translation result, and then by correcting the translation result according to instructions of the code C,

wherein a Machine Translation MT capability is used to produce the translation by the optical character recognition processing of the text of the document in the first language; and

after applying the Machine Translation MT to the text P, the method performing at least one of the steps of: C and E performing the additional processing to improve readability of the text P, wherein the code C contains the operations that the editing functions E perform to produce the ATL; and/or performing disambiguation by framing a series of questions to a person fluent with the first language, and using by the translation software answers to the questions to make choices of word sense and sentence patterns in the second language, the code C recording the answers to the series of questions so the fluent person's knowledge is available for guidance when a translation is undertaken.

6. (Currently amended) The method of claim 5, wherein said ~~machine-readable code is a~~ glyphs are self clocking glyph shape codecodes.

7. (Canceled)

8. (Currently Amended) The method of ~~claim 7~~ claim 5 further comprising the step of utilizing an assist channel to ~~perform an~~ perform the optical character recognition operation on the human-readable text, wherein the assist channel encodes information that assists in the identification of failures of the optical character recognition operation; the assist channel being included in the language translation data by use of the electronic device, which is an optical character recognition device.

9. (Previously presented) The method of claim 5 wherein the language translation data encoded in said machine-readable code includes language translation data for a plurality of foreign languages; and wherein the step of producing the human-readable translation further comprises the steps of:

identifying a portion of the machine-readable code in the image data representing the document that corresponds to the selected foreign language; and
decoding the identified portion of the machine-readable code.

10. (Previously Presented) The method of claim 9 wherein said decoding step is further comprised of steps of:

translating the human-readable text into the human-readable translation of said selected foreign language; and

improving the human-readable translation of said selected foreign language using the identified portion of the machine-readable code.

11. (Previously Presented) The method of claim 5 wherein the language translation data encoded in the machine-readable code is a complete human-readable translation of the human-readable text in a compressed form; and wherein producing the human-readable translation of said document in said selected foreign language using the language translation data encoded in said machine-readable code includes performing a decompression operation on the language translation data.

12. (Canceled)

13. (Previously Presented) The method of claim 5 wherein the language translation data encoded in the machine-readable code includes a correction code indicating correct word usage in the selected foreign language; and

wherein producing the human-readable translation of said document in said selected foreign language using the language translation data encoded in said machine-readable code includes performing a dictionary look-up operation of the human-readable text to perform a first word-for word translation; and performing at least one editing operation on the first word-for word translation using the correction code to produce the human-readable translation of said document in said selected foreign language.

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Currently amended) The method according to ~~claim 19~~ claim 5, wherein in addition to providing the correction code C, further including secondary information that also encodes information that describes at least one of,

(i) an encoding scheme, (ii) a compression algorithm, (iii) settings such as one of a font identifier, error correction data, or codes for characters, (iv) datasets, and (v) hints that are used to translate the text of the document.

21. (Canceled)